#### What is Cancer?

Approved by the Cancer. Net Editorial Board, 08/2019

Cancer is a group of more than 100 different diseases. It can develop almost anywhere in the body.

### How cancer begins

Cells are the basic units that make up the human body. Cells grow and divide to make new cells as the body needs them. Usually, cells die when they get too old or damaged. Then, new cells take their place.

Cancer begins when genetic changes interfere with this orderly process. Cells start to grow uncontrollably. These cells may form a mass called a tumor. A tumor can be cancerous or benign. A cancerous tumor is malignant, meaning it can grow and spread to other parts of the body. A benign tumor means the tumor can grow but will not spread.

Some types of cancer do not form a tumor. These include leukemias, most types of lymphoma, and myeloma.

### Types of cancer

Doctors divide cancer into types based on where it begins. Four main types of cancer are:

- Carcinomas. A carcinoma begins in the skin or the tissue that covers the surface of internal organs and glands. Carcinomas usually form solid tumors. They are the most common type of cancer. Examples of carcinomas include <a href="mailto:prostate">prostate</a> cancer, <a href="mailto:pung cancer">pung cancer</a>, and <a href="mailto:colorectal cancer">colorectal cancer</a>.
- Sarcomas. A sarcoma begins in the tissues that support and connect the body. A sarcoma can develop in fat, muscles, nerves, tendons, joints, blood vessels, lymph vessels, cartilage, or bone.
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**Leukemias.** Leukemia is a cancer of the blood. Leukemia begins when healthy blood cells change and grow uncontrollably. The 4 main types of leukemia are <u>acute lymphocytic leukemia</u>, <u>chronic lymphocytic leukemia</u>, and <u>chronic myeloid leukemia</u>.

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- **Lymphomas.** Lymphoma is a cancer that begins in the lymphatic system. The lymphatic system is a network of vessels and glands that help fight infection. There are 2 main types of lymphomas: **Hodgkin lymphoma** and **non-Hodgkin lymphoma**.
- There are many other types of cancer. Learn more about these other types of cancer.

## How cancer spreads

As a cancerous tumor grows, the bloodstream or lymphatic system may carry cancer cells to other parts of the body. During this process, the cancer cells grow and may develop into new tumors. This is known as metastasis.

One of the first places a cancer often spreads is to the lymph nodes. Lymph nodes are tiny, bean-shaped organs that help fight infection. They are located in clusters in different parts of the body, such as the neck, groin area, and under the arms.

Cancer may also spread through the bloodstream to distant parts of the body. These parts may include the bones, liver, lungs, or brain. Even if the cancer spreads, it is still named for the area where it began. For example, if breast cancer spreads to the lungs, it is called metastatic breast cancer, not lung cancer.

Watch a brief video about how cancer begins and spreads to other parts of the body.

Video used with permission from BioDigital Systems. Read a full-text transcript.

# Diagnosing cancer

Often, a diagnosis begins when a person visits a doctor about an unusual symptom. The doctor will talk with the person about his or her medical history and symptoms. Then the doctor will do various tests to find out the cause of these symptoms.

But many people with cancer have no symptoms. For these people, cancer is diagnosed during a medical test for another issue or condition.

Sometimes a doctor finds cancer after a screening test in an otherwise healthy person. Examples of screening tests include <u>colonoscopy</u>, <u>mammography</u>, and a <u>Pap test</u>. A person may need more tests to confirm or disprove the result of the screening test.